Course syllabus

Animaliska livsmedel
Animal based food products

YTHA45, 7,5 credits, G1 (First Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED LIV
Date of Decision: 2023-04-17

General Information

Main field: Food Science. **Depth of study relative to the degree requirements:** First cycle, has less than 60 credits in first-cycle course/s as entry requirements.
Language of instruction: The course will be given in Swedish

Aim

Animal based food products comprises the production of milk, egg, meat and fish. The aim of the course is to provide the student with the knowledge of how to ensure that both fresh and processed animal based food products reach the consumers with optimal quality and minimal environmental impact.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- have knowledge of how food legislation laws regulate milk, egg, meat, fish, and their processed/refined products
- have knowledge of the production process for milk, egg, meat, and fish
- have detailed knowledge of the composition and structure of animal based foods as well as the function and characteristics of these components
- have knowledge of the most common micro-organisms in animal based foods, including spoilage bacteria, pathogens, and those used in a positive way, as well as how to analyze these microorganisms
- have knowledge of the industrial processing of milk, egg, meat and fish, and have knowledge of the equipment used, how choices of raw material are made, and how the manufacturing process and storage affects the final product

- have knowledge of what happens in animal based foods during cooking /preparation
- have knowledge of the nutritional value of milk, egg, meat, fish, and their processed products

Competences and skills
For a passing grade the student must

- be able to decide which functional properties are possessed by the different components in animal based foods

Judgement and approach
For a passing grade the student must

- be able to handle animal aspects from an ethical and social perspective.

Contents

The definition of animal based foods includes milk, egg, meat, fish and their processed products. This course deals with the entire production process from breeding and rearing, to handling and storage routines, industrial processing, creation of value added products, preparation and cooking, and finally consumption. The choice of raw material, handling routines and equipment will be discussed from the point of view of eating quality, and suitability as a raw material from both the perspective of the food industry and environmental impact. Animal aspects will be discussed from an ethical and social perspective.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)
Assessment: Written examination, laboratory exercises, written tasks, study visits, guest lectures and seminars.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts
Code: 0120. **Name:** Written Examination.
Credits: 2,5. **Grading scale:** UG. **Assessment:** Passed written exam.
Code: 0220. **Name:** Study Visits and Guest Lectures.
Credits: 1. **Grading scale:** UG. **Assessment:** Active participation during compulsory study visits and guest lectures.
Code: 0320. **Name:** Handing in Report Popular Science Article.
Credits: 1,5. **Grading scale:** UG. **Assessment:** Handed in and approved article as well as active participation in peer review, everything individually.
Code: 0420. **Name:** Laboratory Experiments.
Credits: 1,5. **Grading scale:** UG. **Assessment:** Accomplished laboratory experiments and approved written laboratory reports.
Code: 0520. **Name:** Seminar on Ethical Perspectives.
Credits: 1. **Grading scale:** UG. **Assessment:** Active participation in the group work and individual oral presentation.

Admission

Assumed prior knowledge: YTHA71 Food Chemistry I, YTHA73 Food Microbiological Bases, YTHA66 Basic Nutrition, YTHF35 Food Microbiological Quality, YTHF15 Food Chemistry II, YTHF10 Food Technology - Food Preparation Processes
The number of participants is limited to: No

Reading list

- Nylander, A et al.: Livsmedelsvetenskap. Studentlitteratur, 2014, ISBN: 978-91-44-09567-7.
- Furugren, B: Animaliska livsmedel. 2016.
- Molin, G: Livsmedelsmikrobiologi. Göran Molin Förlag AB, 1998. Pdf.
- Thourgaard et al.: Grundläggande mikrobiologi med livsmedelsapplikationer. Studentlitteratur, 2007, ISBN: 978-91-44-00656-7.
- Johansson U. & Stubbendorff A.: Näring och hälsa. Studentlitteratur AB, 2020, ISBN: 978-91-44-12594-7.

Contact and other information

Course coordinator: Birgitta Åsman, birgitta.asman@food.lth.se
Course homepage: https://www.ple.lth.se/en/
Further information: Study visits and guest lectures are compulsory. In case of legal impediment the student has to accomplish an individual assignment with an equivalent content.